

APPENDIX 7. 2000 REFEREEED PUBLICATIONS

LABORATORY FOR ATMOSPHERES

Adler, R., G. Huffman, D. Bolvin, S. Curtis, and E. Nelkin, 2000: Tropical rainfall distributions determined using TRMM combined with other satellite and raingauge information. *J. Appl. Meteor.*, 39, 2007-2023.

Schoeberl, M. R., L. C. Sparling, C. H. Jackman and E. L. Fleming, A lagrangian view of stratospheric trace gas distributions. *J. Geophys. Res.*, 105, 1537-1552.

Schoeberl, M. R. and G. A. Morris, A lagrangian simulation of supersonic and subsonic aircraft exhaust emissions. *J. Geophys. Res.*, 105, 11,833-11,839.

SOUNDER RESEARCH TEAM

Anyamba, E., E. Williams, J. Susskind, A. Fraser-Smith and M. Fullekrug, The manifestation of the madden-julian oscillation in global deep convection and in the schumann resonance intensity. *J. Atmos. Sci.*, 57, 1029-1044.

Anyamba, E. K. and J. Susskind, Evidence of lunar phase influence on global surface air temperature. *Geophys. Res. Lett.*, 27, 2969-2972.

Barnet, C., J. M. Blaisdell and J. Susskind, Practical methods for rapid and accurate computation of interferometric spectra for remote sensing applications. *IEEE Transactions on Geoscience and Remote Sensing*, 38, 168-183.

Lakshmi, V. and J. Susskind, Comparison of TOVS-derived land surface variables with ground observations. *J. Geophys. Res.-Atmos.*, 105, 2179-2190.

DATA ASSIMILATION OFFICE

Atlas, R. and R. N. Hoffman, The use of satellite surface wind data to improve weather analysis and forecasting at the NASA Data Assimilation Office. *Satellites, Oceanography and Society*, 57-78.

Chang, Y., S. D. Schubert and M. J. Suarez, Boreal winter predictions with the GEOS-2 GCM: The role of boundary forcing and initial conditions. *Quart. J. Roy. Meteor. Soc.*, 126, 2293-2321.

Dee, D. P. and R. Todling, Data assimilation in the presence of forecast bias: The GEOS moisture analysis. *Mon. Wea. Rev.*, 128, 3268-3282.

Durkee, P. A., K. E. Nielsen, P. J. Smith, P. B. Russell, B. Schmid, J. M. Livingston, B. N. Holben, C. Tomasi, V. Vitale, D. Collins, R. C. Flagan, J. H. Seinfeld, K. J. Noone, E. Ostrom, S. Gasso, D. Hegg and L. M. Russell, Regional aerosol optical depth characteristics from satellite observations: ACE-1, TARFOX and ACE-2 results. *Tellus Series B-Chemical and Physical Meteorology*, 52, 484-497.

Erickson, D. J. III, R. Zepp and R. Atlas, Ozone depletion and the air-sea exchange of greenhouse and climate reactive gases. *Chemosphere - Global Change Science*, 137-149.

2000 REFEREE PUBLICATIONS

- Flesia, C., C. L. Korb and C. Hirt, Double-edge molecular measurement of lidar wind profiles at 355 nm. *Optics Letters*, 25, 1466-1468.
- Fox-Rabinovitz, M., G. L. Stenchikov, M. J. Suarez, L. L. Takacs and R. C. Govindaraju, A uniform- and variable-resolution stretched-grid GCM dynamical core with realistic orography. *Mon. Wea. Rev.*, 128, 1883-1898.
- Fox-Rabinovitz, M. S., Simulation of anomalous regional climate events with a variable-resolution stretched-grid GCM. *J. Geophys. Res.*, 105, 29,635-29,645.
- Gentry, B. M., H. L. Chen and S. X. Li, Wind measurements with 355-nm molecular doppler lidar. *Optics Letters*, 25, 1231-1233.
- Hou, A. Y., D. V. Ledvina, A. M. da Silva, S. Q. Zhang, J. Joiner and R. M. Atlas, Assimilation of SSM/I-derived surface rainfall and total precipitable water for improving the GEOS analysis for climate studies. *Mon. Wea. Rev.*, 128, 509-537.
- Hou, A.Y., S.Q. Ahang, A.M. da Silva, and W. Olson, Improving assimilated global data sets using TMI rainfall and columnar moisture observations, *J. Climate*, 13, 4180-4195.
- Joiner, J. and D. Dee, An error analysis of radiance and suboptimal retrieval assimilation. *Quart. J. Roy. Meteor. Soc.*, 126, 1495-1514.
- Joiner, J. and L. Rokke, Variational cloud-clearing with TOVS data. *Quart. J. Roy. Meteor. Soc.*, 126, 725-748.
- Kodera, K., Y. Kuroda and S. Pawson, Stratospheric sudden warmings and slowly propagating zonal-mean zonal wind anomalies. *J. Geophys. Res.*, 105, 12,351-12,359.
- Li, Y., J. Ruge, J. R. Bates and A. Brandt, A proposed adiabatic formulation of 3-dimensional global atmospheric models based on potential vorticity. *Tellus*, 52A, 129-139.
- Menard, R., S. E. Cohn, L.-P. Chang and P. M. Lyster, Assimilation of stratospheric chemical tracer observations using a kalman filter. Part I: Formulation. *Mon. Wea. Rev.*, 128, 2654-2671.
- Menard, R. and L.-P. Chang, Assimilation of stratospheric chemical tracer observations using a kalman filter. Part II: X-Squared validated results and analysis of variance and correlation dynamics. *Mon. Wea. Rev.*, 128, 2671-2685.
- Otterman, J., J. Ardizzone, R. Atlas, H. Hu, J.C. Jusem and D. Starr, Winter-to-spring transition in Europe 48-54° N: From temperature control by advection to control by isolation. *Geophys. Res. Lett.*, 27, 561-564.
- Otterman, J., R. Atlas, J. Ardizzone, T. Brakke, S.-H. Chou, J. C. Jusem, M. Glantz, J. Rogers, Y. Sud, J. Susskind, D. Starr and J. Terry, Extreme winter/early-spring temperature anomalies in central Europe. *Research Reports Yagellonian University*, 15, 193-200.
- Omidvar, K., Electron capture into Rydberg States according to the born approximation: Correction of an error. *Phys. Rev. A*, 61, 064701.

Pawson, S., K. Kodera, K. Hamilton, T. G. Shepherd, S. R. Beagley, B. A. Boville, J. D. Farrara, T. D. A. Fairlie, A. Kitoh, W. A. Lahoz, U. Langematz, E. Manzini, D. H. Rind, A. A. Scaife, K. Shibata, P. Simon, R. Swinbank, L. Takacs, R. J. Wilson, J. A. Al-Saadi, M. Amodei, M. Chiba, L. Coy, J. de Grandpré, R. S. Eckman, M. Fiorino, W. L. Grose, H. Koide, J. N. Koshyk, D. Li, J. Lerner, J. D. Mahlman, N. A. McFarlane, C. R. Mechoso, A. Molod, A. O'Neill, R. B. Pierce, W. J. Randel, R. B. Rood and F. Wu, The GCM-reality intercomparison project for SPARC (GRIPS): Scientific issues and initial results. *Bull. Amer. Meteor. Soc.*, 81, 781-796.

Riishojgaard, L. P., A method for estimating the analysis error variance in a physical space data assimilation system. *Quart. J. Roy. Meteor. Soc.*, 126, 1367-1385.

Riishojgaard, L. P., I. Stajner and G. P. Lou, The GEOS ozone data assimilation system. *Rem. Sens. Appl.: Earth, Atmos. and Oceans*, 25, 1063-1072.

Rood, R. B., A. R. Douglass, M. C. Cerniglia, L. C. Sparling and J. E. Nielsen, Seasonal variability of middle-latitude ozone in the lowermost stratosphere derived from probability distribution functions. *J. Geophys. Res.*, 105, 17,793-17,805.

Scaife, A. A., J. Austin, N. Butchart, S. Pawson, M. Keil, J. Nash and I. N. James, Seasonal and interannual variability of the stratosphere diagnosed from UKMO TOVS analyses. *Quart. J. Roy. Meteor. Soc.*, 126, 2585-2604.

Shay-El, Y., P. Alpert and A. da Silva, Preliminary estimation of horizontal fluxes of cloud liquid water in relation to subtropical moisture budget studies employing ISCCP, SSMI and GEOS-1/DAS data sets. *J. Geophys. Res.-Atmos.*, 105, 18067-18089.

Shukla, J., J. Anderson, D. Baumhefner, C. Brankovic, Y. Chang, E. Kalnay, L. Marx, T. Palmer, D. Paolino, J. Ploshay, S. Schubert, D. Straus, M. Suarez and J. Tribbia, Dynamical seasonal prediction. *Bull. Amer. Meteor. Soc.*, 81, 2593-2606.

Strahan, S. E., Climatologies of lower stratospheric NO_y and O₃ and correlations with N₂O based on *in situ* observations. *J. Geophys. Res.-Atmos.*, 104, 30,463-30,480.

Tangborn, A. and S. Q. Zhang, Wavelet transform adapted to an approximate kalman filter system. *Appl. Num. Math.*, 33, 307-316.

Thuburn, J. and Y. Li, Numerical simulations of Rossby-Haurwitz waves. *Tellus*, 52A, 181-189.

Tippett, M. K., S. E. Cohn, R. Todling and D. Marchesin, Low-dimensional representation of error covariance. *Tellus*, 52, 533-553.

Tippett, M. K., S. E. Cohn, R. Todling and D. Marchesin, Conditioning of the stable, discrete-time Lyapunov operator. *SIAM*, 22, 56-65.

Verter, F., L. Magnani, E. Dwek and L. J. Rickard, Infrared properties of molecular cirrus. II. Cloud-to-cloud variations in graphite and polycyclic aromatic hydrocarbon content. *Astro. J.*, 536, 831-844.

MESOSCALE ATMOSPHERIC PROCESSES BRANCH

Ackerman, A. S., O. B. Toon, D. E. Stevens, A. J. Heymsfield, V. Ramanathan and E. J. Welton, Reduction of tropical cloudiness by soot. *Science*, 288, 1042-1047.

2000 REFEREE PUBLICATIONS

- Amitai, E., 2000: Systematic variation of observed radar reflectivity-rainfall rate relations in the tropics. *J. Appl. Meteor.*, 39, 2198-2208.
- Atlas, D., C. W. Ulbrich, F. D. Marks, R. A. Black, E. Amitai, P. T. Willis and C. E. Samsury, Partitioning tropical oceanic convective and stratiform rains by draft strength. *J. Geophys. Res.-Atmos.*, 105, 2259-2267.
- Atlas, D., Millennium perspectives. *Bull. Amer. Meteor. Soc.*, 81, 2224-2225.
- Baker, R. D., G. Schubert and P. W. Jones, Convectively generated internal gravity waves in the lower atmosphere of venus. Part I: No wind shear. *J. Atmos. Sci.*, 57, 184-199.
- Baker, R. D., G. Schubert and P. W. Jones, Convectively generated internal gravity waves in the lower atmosphere of venus. Part II: Mean wind shear and wave -- mean flow interaction. *J. Atmos. Sci.*, 57, 200-215.
- Bauer, P., A. Khain, I. Sednev, R. Meneghini, C. Kummerow, F. Marzano and J. P. V. Poiares Baptista, Combined cloud-microwave radiative transfer modeling of stratiform rainfall. *J. Atmos. Sci.*, 57, 1082-1104.
- Baum, B. A. and J. D. Spinhirne, Remote sensing of cloud properties using MODIS airborne simulator imagery during SUCCESS 3. Cloud overlap. *J. Geophys. Res.-Atmos.*, 105, 11793-11804.
- Berkoff, T. A., D. N .Whiteman, R. D. Rallison, G. K. Schwemmer, L. Ramos-Izquierdo and H. Plotkin, Remote detection of raman scattering by use of a holographic optical element as a dispersive telescope. *Optics Letters*, 25, 1201-1203.
- Chepfer, H., P. H. Flaman, L. Sauvage, P. Goloub, G. Brogniez, J. Spinhirne, M. Lavorato and J. Pelon, Cirrus cloud properties derived from POLDER-1/ADEOS polarized radiances: First validation using a ground-based lidar network. *J. Appl. Meteor.*, 39, 154-168.
- Chou, S.-H., W. Zhao and M.-D. Chou, Surface heat budgets and sea surface temperature in the pacific warm pool during TOGA COARE. *J. Climate*, 13, 634-649.
- Curtis, S. and R. Adler, ENSO indices based on patterns of satellite-derived precipitation. *J. Climate*, 13, 2786-2793.
- Ferrare, R., S. Ismail, E. Browell, V. Brackett, M. Clayton, S. Kooi, S.H. Melfi, D. Whiteman, G. Schwemmer, K. Evans, P. Russell, J. Livingston, B. Schmid, B. Holben, L. Remer, A. Smirnov, and P. Hobbs, 2000: Comparison of aerosol optical properties and water vapor among ground and airborne lidars and sun photometers during TARFOX, *J. Geophys. Res.-Atmos.*, 105, 9917-9934.
- Gabella, M. and E. Amitai, Radar rainfall estimates in an alpine environment using different gage adjustment techniques. *Physics and Chemistry of the Earth. Part B-Hydrology Oceans and Atmosphere*. 25, 927-931.

Geerts, B., G. Heymsfield, L. Tian and J. Halverson, Hurricane Georges' landfall in the Dominican Republic: Detailed airborne doppler radar imagery. *Bull. Amer. Meteor. Soc.*, 81, 999-1018.

Grecu, M., E. N. Anagnostou and R. F. Adler, Assessment of the use of lightning information in satellite infrared rainfall estimation. *J. Hydrometer.*, 1, 211-221.

Hong, Y., J. Haferman, W. Olson and C. Kummerow, Microwave brightness temperatures of tilted convective systems. *J. Appl. Meteor.*, 39, 983-998.

Jameson, A. R. and A. B. Kostinski, The effect of stochastic cloud structure on the icing process. *J. Atmos. Sci.*, 57, 2883-2891.

Jameson, A. R. and A. B. Kostinski, Fluctuation properties of precipitation. Part V: On the distribution of rain rates – theory and observations in clustered rain. *J. Atmos. Sci.*, 57, 373-388.

Kalnay, E., S. K. Park, Z.-X. Pu and J. Gao, Application of the quasi-inverse method to data assimilation. *Mon. Wea. Rev.*, 128, 864-875.

Karyampudi, V. M., S. Palm, J. Reagan, H. Fang, W. Grant, R. Hoff, C. Moulin, H. Pierce, O. Torres, E. Browell and S. Melfi, Validation of the saharan dust plume conceptual model using lidar, meteosat and ecmwf data. *Bull. Amer. Meteor. Soc.*, 80, 1046-1075.

Koivunen, A. C. and A. B. Kostinski, A feasibility of data whitening to improve performance of weather radar. *J. Appl. Meteor.*, 38, 741-749.

Kostinski, A. B. and A. R. Jameson, On the spatial distribution of cloud particles. *J. Atmos. Sci.*, 57, 901-915.

Kostinski, A. B. and A. C. Koivunen, On the condition number of gaussian sample covariance matrices. *IEEE Transactions on Geoscience and Remote Sensing*, 38, 329-332.

Kummerow, C., J. Simpson, O. Thiele, W. Barnes, A.T.C. Chang, E. Stocker, R.F. Adler, A. Hou, R. Kakar, F. Wentz, P. Ashcroft, T. Kozu, Y. Hong, K. Okamoto, T. Iguchi, H. Kuroiwa, E. Im, Z. Haddad, G. Huffman, B. Ferrier, W.S. Olson, E. Zipser, E.A. Smith, T.T. Wilheit, G. North, T. Krishnamurti, K. Nakamura, 2000: The Status of the Tropical Rainfall Measuring Mission (TRMM) after Two Years in Orbit. *J. Appl. Meteor.*, 39, 1965-1982.

Lucas, C. L, E. J. Zipser and B. S. Ferrier, Sensitivity of tropical west pacific oceanic squall lines to tropospheric wind and moisture profiles. *J. Atmos. Sci.*, 57, 2351-2373.

Marks, D. A., M. S. Kulie, M. Robinson, D. S. Silberstein, D. B. Wolff, B. S. Ferrier, E. Amitai, B. Fisher, J. Wang, D. Augustine and O. Thiele, Climatological processing and product development for the TRMM Ground Validation Program. *Physics and Chemistry of the Earth. Part B-Hydrology Oceans and Atmosphere*, 25, 871-875.

Negri, A. J., E. N. Anagnostou and R. F. Adler, A 10-year climatology of amazonian rainfall derived from passive microwave satellite observations. *J. Appl. Meteor.*, 39, 42-56.

Peppler, R. A., C. P. Bahrmann, J. C. Barnard, J. R. Campbell, M. D. Cheng, R. A. Ferrare, R. N. Halthore, L. A. Heilman, D. Hlavka, N. S. Laulainen, C. J. Lin, J. A. Ogren, M. R. Poellot, L.

2000 REFEREED PUBLICATIONS

- A. Remer, K. Sassen, J. Spinhirne, M. E. Splitt and D. D. Turner, ARM southern great plains site observations of the smoke pall associated with the 1998 central american fires. *Bull. Amer. Meteor. Soc.*, 81, 2563-2592.
- Powell, D. M., J. A. Reagan, M. A. Rubio, W. H. Erxleben and J. D. Spinhirne, ACE-2 multiple angle micro-pulse lidar observations from Las Galletas, Tenerife, Canary Islands. *Tellus Series B—Chemical and Physical Meteorology*, 52, 652-661.
- Qian, W. and S. Yang, Onset of the regional monsoon over Southeast Asia. *Meteor. and Atmos. Physics*, 75, 29-38.
- Rao, P. A. and H. E. Fuelberg, An investigation of convection behind the cape canaveral sea breeze front. *Mon. Wea. Rev.*, 128, 3437-3458.
- Redelsperger, J. L., P. R. A. Brown, F. Guichard, C. Hoff, M. Kawasima, S. Lang, T. Montmerle, K. Nakamura, K. Saito, C. Seman, W. K. Tao and L. J. Donner, A GCSS model intercomparison for a tropical squall line observed during TOGA-COARE. I: Cloud-resolving models. *Quart. J. Roy. Meteor. Soc.*, 126, 823-863.
- Robinson M., M.S. Kulie, D. Silberstein, D.A. Marks, D.B. Wolff, E. Amitai, B.S. Ferrier, B.L. Fisher, and J. Wang, 2000: Evolving Improvements to TRMM Ground Validation Rainfall Estimates. *Phys. Chem. Earth (B)*, 25, 971-976.
- Rodgers, E., W. Olson, J. Halverson, J. Simpson, H. Pierce, 2000: Environmental forcing of Supertyphoon Pak's (1997) latent heat structure. *J. Appl. Meteor.*, 39, 1983-2006.
- Rodgers, E. B., R. F. Adler and H. F. Pierce, Contribution of tropical cyclones to the north pacific climatological rainfall as observed from satellites. *J. Appl. Meteor.*, 39, 1658-1678.
- Sassen, K., R. P. Benson and J. D. Spinhirne, Tropical cirrus cloud properties derived from TOGA/COARE airborne polarization lidar. *Geophys. Res. Lett.*, 27, 673-676.
- Schmid, B., J. Livingston, P. Russel, P. Durkee, H. H. Jonsson, D. R. Collins, R. C. Flagan, J. H. Seinfeld, S. Gasso, D. A. Hegg, E. Ostrom, K. J. Noone, E. J. Welton, K. J. Voss, H. R. Gordon, P. Formenti and M. O. Andreae, Clear sky closure studies of lower tropospheric aerosol and water vapor during ace-2 using airborne sunphotometer, airborne in-situ, space-borne and ground-based measurements. *Tellus B*, 52, 567-592.
- Simpson, J., R. F. Adler, J. B. Halverson, A. J .Negri and H. Pierce, Necrology – Edward B. Rodgers 1939-2000. *Bull. Amer. Meteor. Soc.*, 81, 2236-2237.
- Tao, W.-K., R. Adler, S. Braun, F. Einaudi, B. Ferrier, J. Halverson, G. Heymsfield, C. Kummerow, A. Negri and R. Kakar, Summary of a symposium on cloud systems, hurricanes and TRMM: Celebration of Dr. Joanne Simpson's career – the first fifty yearS. *Bull. Amer. Meteor. Soc.*, 81, 2463-2474.
- Tao, W. K., S. Lang, J. Simpson, W. S. Olson, D. Johnson, B. Ferrier, C. Kummerow and R. Adler, Vertical profiles of latent heat release and their retrieval for TOGA COARE convective systems using a cloud resolving model, SSM/I and ship-borne radar data. *J. Meteor. Soc. Japan*, 78, 333-355.

Tokay, A., R. Chamberlain and M. Schoenhuber, Laboratory and field measurements of raindrop oscillations. *Physics and Chemistry of the Earth. Part B-Hydrology Oceans and Atmosphere.* 25, 867-870.

Tuttle, J., R. Carbone and J.-J. Wang, Trade wind rainfall near the windward coast of Hawaii: Corrected data yield improved results. *Mon. Wea. Rev.*, 128, 896-900.

Viltard, N., C. Kummerow, W.S. Olson, Y. Hong, 2000: Combined use of the radar and radiometer of TRMM to estimate the influence of drop size distribution on rain retrievals. *J. Appl. Meteor.*, **39**, 2103-2114.

Wang, J.-J., R. M. Rauber, H. T. Ochs and R. Carbone, The effects of the island of Hawaii on offshore rainband evolution. *Mon. Wea. Rev.*, 128, 1052-1069.

Welton, E. J., K. J. Voss, H. R. Gordon, H. Maring, A. Smirnov, B. Holben, B. Schmid, J. Livingston, P. Russell, P. Durkee, P. Formenti and M. O. Andreae, Ground-based lidar measurements of aerosols during ace-2: Instrument description, results and comparisons with other ground-based airborne measurements. *Tellus B*, 52, 635-650.

Williams, C. R., A. Kruger, K. S. Gage, A. Tokay, R. Cifelli, W. F. Krajewski and C. Kummerow, Comparison of simultaneous rain drop size distributions estimated from two surface disdrometers and a UHF profiles. *Geophys. Res. Lett.*, 27, 1763-1766.

Williams, C.R., P.E. Johnston, W.L. Eckland, R. Cifelli, A. Tokay, D.A. Carter, 2000: Doppler radar profilers as calibration tools for scanning radars. *J. Appl. Meteor.*, **39**, 2209-2222.

Yang, S. and E.A. Smith, 2000: Vertical structure and transient behavior of convective-stratiform heating in TOGA-COARE from combined satellite-sounding analysis. *J. Appl. Meteor.*, **39**, 1491-1513.

CLIMATE AND RADIATION BRANCH

Alpert, P., J. Herman, Y. J. Kaufman and I. Carmona, Response of the climatic temperature to dust forcing, inferred from total ozone mapping spectrometer (TOMS) aerosol index and the NASA assimilation model. *J. Atmos. Res.*, 53, 13-14.

Artaxo, P. R.C. de Campos, E.T. Fernandes, J.V. Martins, Z. Xiao, O. Lindqvist, M.T. Fernandez-Jimenez, W. Maenhaut, Large scale mercury and trace element measurements in the Amazon Basin. *Atmos. Environ.*, **34**, 4085-4096.

Baode C. and M. Yanai, Comparison of the Madden-Julian oscillation (MJO) during the TOGA-COARE IOP with a 15-year climatology. the TOGA-COARE IOP with a 15-year climatology. *J. Geophys. Res.*, 105, 2139-2149.

Baum, B. A., D. P. Kratz, P. Yang, S. C. Ou, Y. Hu, P. Soulen and S. C. Tsay, Remote sensing of cloud properties using MODIS airborne simulator imagery during SUCCESS 1. Data and Models. *J. Geophys. Res.*, 105, 11767-11780.

Baum, B. A., P. F. Soulen, K. I. Strabala, M. D. King, S. A. Ackerman, W. P. Menzel and P. Yang, Remote sensing of cloud properties using MODIS airborne simulator imagery during SUCCESS 2. Cloud thermodynamic phase. *J. Geophys. Res.-Atmos.*, 105, 11781-11792.

2000 REFEREE PUBLICATIONS

- Bell, T. L. and P. K. Kundu, Dependence of satellite sampling error on monthly averaged rain rates: Comparison of simple models and recent studies. *J. Climate*, 13, 449-462.
- Chao, W. C., Multiple quasi-equilibria of the ITCZ and the origin of monsoon onset. *J. Atmos., Sci.*, 57, 641-652.
- Chiapello, I., P. Goloub, D. Tanré, A. Marchand, J. Herman and O. Torres, Aerosol detection by TOMS and POLDER over oceanic regions. *J. Geophys. Res.-Atmos.*, 105, 7133-7142.
- Chou, S. H., W. Zhao and M. D. Chou, Surface heat budgets in the Pacific warm pool during TOGA COARE. *J. Climate*, 13, 634-649.
- Coakley, J. A., P. A. Durkee, K. Nielsen, J. P. Taylor, S. Platnick, B. A. Albrecht, D. Babb, F. L. Chang, W. R. Tahnk, C. S. Bretherton and P. V. Hobbs, The appearance and disappearance of ship tracks on large spatial scales. *J. Atmos., Sci.*, 57, 2765-2778.
- DeFelice, T. P., D. J. Meyer, G. Xian, J. Christopherson and R. F. Cahalan, Landsat-7 reveals more than just surface features in remote areas of the globe. *Bull. Amer. Meteor. Soc.*, 81, 1047-1049.
- Demoz, B., D. Starr, D. Whiteman, K. Evans, D. Hlavka and R. Perivali, Raman LIDAR detection of cloud base. *Geophys. Res. Lett.*, 27, 1899-1902.
- Dubovik, O., A. Smirnov, B. N. Holben, M. D. King, Y. J. Kaufman, T. F. Eck and I. Slutsker, Accuracy assessment of aerosol optical properties retrieval from AERONET sun and sky radiance measurements. *J. Geophys. Res.*, 105, 9791-9806.
- Ducharne, A., R. D. Koster, M. J. Suarez, M. Stieglitz and P. Kumar, A catchment-based approach to modeling land surface processes in a general circulation model. 2. Parameter estimation and model demonstration. *J. Geophys. Res.-Atmos.*, 105, 24823-24838.
- Durkee, P. A., R. E. Chartier, A. Brown, E. J. Trehubenko, S. D. Rogerson, C. Skupniewicz, K. E. Nielsen, S. Platnick and M. D. King, Composite ship track characteristics. *J. Atmos. Sci.*, 57, 2542-2553.
- Ferrare, R., S. Ismail, E. Browell, V. Brackett, M. Clayton, S. Kooi, S. H. Melfi, D. Whiteman, G. Schwemmer, K. Evans, P. Russell, J. Livingston, B. Schmid, B. Holben, L. Remer, A. Smirnov and P. Hobbs, Comparison of aerosol optical properties and water vapor among ground and airborne lidars and sun photometers during TARFOX. *J. Geophys. Res.*, 105, 9917-9934.
- Ghan, S. J., D. Randall, K. Xu, R. Cederwall, D. Cripe, J. Hack, S. Iacobellis, S. Kelin, S. Krueger, U. Lohmann, J. Pedretti, A. Robock, L. Rotstain, R. Somerville, G. Stenchikov, Y. Sud, G. Walker, S. Xie, J. Yio and M. Zhang, A comparison of single column model simulations of summertime midlatitude continental convection. *J. Geophys. Res. Atmos.*, 105, 2091-2124.
- Hu, Y. X., B. Weilicki, B. Lin, G. Gibson, S. C. Tsay, K. Stamnes and T. Wong, A fast and accurate treatment of particle scattering phase function with weighted singular-value-decomposition least squares fitting. *J. Quant. Spectrosc. Radiat. Transfer*, 65, 681-690.
- Ji, Q. and S.-C. Tsay, On the dome effect of eppley pyrgeometers and pyranometers. *Geophys. Res. Lett.*, 27, 971-974.

Jones, C., D. E. Waliser, J. K. E. Schemm and W. K. M. Lau, Prediction skill of the madden and julian oscillation in dynamical extended range forecasts. *Climate Dynamics*, 16, 273-289.

Kaufman, Y. J., A. Karnieli and D. Tanré, Detection for dust over the deserts using satellite data in the solar wavelengths. *IEEE TGARS*, 38, 525-531.

Kaufman, Y. J., B. N. Holben, D. Tanré, I. Slutsker, A. Smirnov and T. F. Eck, Will aerosol measurements from Terra and Aqua polar orbiting satellites represent the daily aerosol abundance and properties? *Geophys. Res. Lett.*, 27, 3861-3864.

King, M. D. and D. D. Herring, Monitoring Earth's vital signs. *Scientific American*, 282, 92-97.

Kleidman, R. G., Y. J. Kaufman, L. A. Remer, R. A. Ferrare and B. C. Gao, Remote sensing of total precipitable water vapor in the near-IR over ocean glint. *Geophys. Res. Lett.*, 27, 2657-2660.

Koster, R. D., M. J. Suarez and M. Heiser, Variance and predictability of precipitation at seasonal-to-interannual timescales. *J. Hydrometeor.*, 1, 26-46.

Koster, R. D., M. J. Suarez, A. Ducharne, M. Stieglitz and P. Kumar, A catchment-based approach to modeling land surface processes in a general circulation model. 1. Model structure. *J. Geophys. Res.-Atmos.*, 105, 24809-24822.

Knyazikhin, Y. and A. Marshak, 2000: Mathematical aspects of BRDF modeling: Adjoint problem and Green's Function. *Remote Sens. Review*, 18, 263-280.

Lau, K. M., Y. Ding, J. T. Wang, R. Johnson, T. Keenan, R. Cifelli, J. Gerlach, O. Thiele, T. Rickenbach, S. C. Tsay and P. H. Lin, A report of the field operations and early results of the south china sea monsoon experiment (SCSMEX). *Bull. Amer. Meteor. Soc.*, 81, 1261-1270.

Lau, K. M., K. M. Kim and S. Yang, Dynamical and boundary forcing characteristics of regional components of the Asian summer monsoon. *J. Climate*, 13, 2461-2482.

Liu, L. and B. Chen, Climatic Warming in the Tibetan Plateau during recent decades, *Int. J. Climatology*, 20, 1729-1742.

Li, X., C. H. Sui and K. M. Lau, Interaction between tropical convection and its embedding environment: An energetics analysis of a 2-D cloud resolving simulation. *J. Atmos., Sci.*, 78, 647-659.

Li, X., C.-H. Sui, K. M. Lau and D. Adamec, Effects of precipitation on ocean mixed-layer temperature and salinity as simulated in a coupled ocean-cloud resolving atmosphere model. *J. Meteor. Soc. Japan*, 78, 647-659.

Marshak, A., Y. Knyazikhin, A. B. Davis, W. J. Wiscombe and P. Pilewskie, Cloud-vegetation interaction: Use of normalized difference cloud index for estimation of cloud optical thickness. *Geophys. Res. Lett.*, 27, 1695-1698.

Mehta, V. M., M. J. Suarez, J. V. Manganello and T. L. Delworth, Oceanic influence on the North Atlantic oscillation and associated northern hemisphere climate variations. *Geophys. Res. Lett.*, 27, 121-124.

2000 REFEREE PUBLICATIONS

- Mehta, V. and M. J. Suarez, Decadal-multidecadal variations of ENSO: 1909-1988. *J. Geophys. Res. Lett.*, 27, 121-124.
- Oreopoulos, L., A. Marshak, R. Cahalan and G. Wen, Cloud 3D effects evidenced in Landsat spatial power spectra and autocorrelation functions. *J. Geophys. Res. Lett.*, 105, 14777-14788.
- Oreopoulos, L., R. Cahalan, A. Marshak and G. Wen, A new normalized difference cloud retrieval technique applied to Landsat radiances over the Oklahoma ARM site. *J. Appl. Meteor.*, 39, 2305-2321.
- Platnick, S. P., A. Durkee, K. Nielson, J. P. Taylor, S. C. Tsay, M. D. King, R. J. Ferek and P. V. Hobbs, The role of background cloud microphysics in the radiative formation of ship track formation. *J. Atmos. Sci.*, 57, 2607-2624.
- Platnick, S., Vertical photon transport in cloud remote sensing problems. *J. Geophys. Res.-Atmos.*, 105, 22919-22935.
- Prabhakara, C., R. Iacovazzi, Jr., J. A. Weinman and G. Dalu, A TRMM microwave radiometer rain rate estimation method with convective and stratiform discrimination. *J. Meteor. Soc. of Japan*, 78, 241-258.
- Prabhakara, C., R. Iacovazzi, J. M. Yoo and G. Dalu, Global warming: Evidence from satellite observations. *Geophys. Res. Lett.*, 27, 3517-3520.
- Rolland, P., K. N. Liou, M. D. King, S. C. Tsay and G. M. McFarquhar, Remote sensing of optical and microphysical properties of cirrus clouds using MODIS channels: I. Methodology and sensitivity to assumptions. *J. Geophys. Res.*, 105, 11,721-11,738.
- Smirnov, A., B. N. Holben, O. Dubovik, N. T. O'Neill, L. A. Remer, T. F. Eck, I. Slutsker and D. Savoie, Measurement of atmospheric optical parameters on U.S. atlantic coast sites, ships and Bermuda during TARFOX. *J. Geophys. Res.*, 105, 9887-9902.
- Smirnov, A., B. N. Holben, D. Savoie, J. M. Prospero, Y. J. Kaufman, D. Tanré, T. F. Eck and I. Slutsker, Relationship between column aerosol optical thickness and in situ ground based dust concentrations over Barbados. *Geophys. Res. Lett.*, 27, 1643-1646.
- Soulen, P. F., S. C. Tsay, M. D. King, G. T. Arnold and J. Y. Li, Airborne spectral measurements of surface-atmosphere anisotropy during the SCAR-A, Kuwait oil fire and TARFOX experiments. *J. Geophys. Res.*, 105, 10203-10218.
- Taylor, J. P., M. D. Glew, J. A. Coakley, W. R. Tahnk, S. Platnick, P. V. Hobbs and R. J. Ferek, Effects of aerosols on the radiative properties of clouds. *J. Atmos. Sci.*, 57, 2656-2670.
- Varnai, T., Influence of three-dimensional radiative effects on the spatial distribution of shortwave cloud reflection. *J. Atmos. Sci.*, 57, 216-229.
- Vega, A. J., R. V. Rohli and C. H. Sui, Climatic relationships to Chesapeake Bay salinity during southern oscillation extremes. *Physical Geography*, 20, 468-490.
- Yang, P., K. N. Liou, K. Wyser and D. Mitchell, Parameterization of the scattering and absorption properties of individual ice crystals. *J. Geophys. Res.-Atmos.*, 105, 4699-4718.

Yani, M. and Baode Chen, The Madden-Julian oscillation (MJO) during the TOGA-COARE IOP, *J. Atmos. Sci.*, 57, 2374-2396

ATMOSPHERIC EXPERIMENT BRANCH

Mahaffy, P. R., H. B. Niemann, A. Alpert, S. K. Strey, J. Demick, T. M. Donahue, D. N. Harpold and T. C. Owen, Noble gas abundance and isotope ratios in the atmosphere of Jupiter from the galileo probe mass spectrometer. *J. Geophys. Res.*, 105, 15,061-15,071.

Wolff, C., Linear r-Modes below the Sun's convective envelope. *Astrophys. J.*, 531, 591.

ATMOSPHERIC CHEMISTRY AND DYNAMICS BRANCH

Aikin, A. C. and H. J. P. Smith, Mesospheric odd nitrogen enhancements during relativistic electron precipitation events. *Physics and Chemistry of the Earth Part C-Solar-Terrestrial and Planetary Science*, 25, 203-211.

Allen, D. J., K. Pickering, G. Stenchikov, A. Thompson and Y. Kondo, A three-dimensional total odd nitrogen (NO_y) simulation during SONEX using a stretched-grid chemical transport model. *J. Geophys. Res.*, 105, 3851-3876.

Behrendt, A. and J. Reichardt, Atmospheric temperature profiling in the presence of clouds with a pure rotational Raman lidar using an interference-filter-based polychromator. *Appl. Optics.*, 39, 1372-1378.

Bieberbach, G., H. E. Fuelberg, A. M. Thompson, A. Schmitt, J. R. Hannan, G. L. Gregory, Y. Kondo, R. D. Knabb, G. W. Sachse and R. W. Talbot, Mesoscale numerical investigations of air traffic emissions over the North Atlantic during SONEX flight 8: A case study. *J. Geophys. Res.-Atmos.*, 105, 3821-3832.

Chiapello, I., P. Goloub, D. Tanré, A. Marchand, J. Herman and O. Torres, Aerosol detection by TOMS and POLDER over oceanic regions. *J. Geophys. Res.*, 105, 7133-7142.

Chin, M., D. L. Savoie, B. J. Huebert, A. R. Bandy, D. C. Thorton, T. S. Bates, P. K. Quinn, E. S. Saltzman and W. J. De Bruyn, Atmospheric sulfur cycle simulated in the global model GOCART: Comparison with field observations and regional budgets. *J. Geophys. Res.*, 105, 24,689-24,712.

Chin, M., R. B. Rood, S.-J. Lin, J.-F. Muller and A. M. Thompson, Atmospheric sulfur cycle simulated in the global model GOCART: Model description and global properties. *J. Geophys. Res.*, 105, 24,671-24,687.

Combal, B., S. Oshchepkov, A. Sinyuk, H. Isaka, 2000: Statistical framework of inverse problem in the retrieval of vegetation parameters. *Agronomie*, 20, 65-77.

Considine, D. B., A. R. Douglass, P. S. Connell, D. E. Kinnison and D. A. Rotman, A polar stratospheric cloud parameterization for the global modeling initiative three-dimensional model and its response to stratospheric aircraft. *J. Geophys. Res.-Atmos.*, 105, 3955-3973.

Cunnold, D. M., M. Newchurch, L. Flynn, H. Wang, J. Russell, R. McPeters, J. Zawodny and L. Froidevaux, Uncertainties in upper stratospheric ozone trends. *J. Geophys. Res.*, 105, 4427 - 4444.

2000 REFEREE PUBLICATIONS

- Dessler, A. E., The chemistry and physics of stratospheric ozone. *Academic Press*, 214. Dessler, A. E. and S. C. Sherwood, Simulations of tropical upper tropospheric humidity. *J. Geophys. Res.*, 105, 20,155-20,163.
- Flittner, D. E., P. K. Bhartia and B. Herman, O₃ profiles retrieved from limb scatter measurements: Theory. *Geophys. Res. Lett.*, 27, 2597-2600.
- Folkins, I., S. J. Oltmans and A. M. Thompson, Tropical convection outflow and near-surface equivalent potential temperatures. *Geophys. Res. Lett.*, 27, 2549-2552.
- Gettelman, A., J. R. Holton and A. R. Douglass, Simulations of water vapor in the lower stratosphere and upper troposphere. *J. Geophys. Res.-Atmos.*, 105, 9003-9023.
- Hannan, J. R., H. E. Fuelberg, A. M. Thompson, G. Bieberbach, R. D. Knabb, Y. Kondo, B. E. Anderson, E. V. Browell, G. L. Gregory, G. W. Sachse and H. B. Singh, Atmospheric chemical transport based on high-resolution model-derived winds: A case study. *J. Geophys. Res.*, 105, 3807-3820.
- Herman, J. R., R. D. Piacentini, J. Ziemke, E. Celarier and D. Larko, Interannual variability of ozone and UVB ultraviolet exposure. *J. Geophys. Res.*, 105, 29189-29194.
- Hsu, C. N., J. R. Herman and C. Weaver, Determination of radiative forcing of saharan dust using combined TOMS and ERBE data. *J. Geophys. Res.*, 105, 20,649-20,662.
- Jackman, C. H., E. L. Fleming and F. M. Vitt, Influence of extremely large solar proton events in a changing stratosphere. *J. Geophys. Res.-Atmos.*, 105, 11,659-11,670.
- Jeker, D. P., L. Pfister, A. M. Thompson, D. Brunner, D. J. Boccippio, K. E. Pickering, H. Wernli, Y. Kondo and J. Staehelin, Measurements of nitrogen oxides at the tropopause: Attribution to convection and correlation with lightning. *J. Geophys. Res.-Atmos.*, 105, 3679-3700.
- Kalliskota, S., J. Kaurola, P. Taalas, J. R. Herman, E. A. Celarier and N. A. Krotkov, Comparison of daily UV doses estimated from Nimbus 7/TOMS measurements and ground-based spectroradiometric data. *J. Geophys. Res.-Atmos.*, 105, 5059-5067.
- Khairullina, A., T. Oleinik, A. Sinyuk, V. Babenko, A. Ponyavina, T. Zhevlakova, 2000: Simulation of scattering of optical radiation by a metal surface with nanometer irregularity. *Opt. Spetrosk.*, **88**, 615-618.
- Koike, M., Y. Kondo, G. L. Gregory, B. E. Anderson, G. W. Sachse, D. R. Blake, S. C. Liu, H. B. Singh, A. M. Thompson, K. Kita, Y. Zhao, T. Sugita, R. E. Shetter and N. Toriyama, Impact of aircraft emissions on reactive nitrogen over the North Atlantic flight corridor region. *J. Geophys. Res.-Atmos.*, 105, 3665-3677.
- Krotkov, N. A. and A. P. Vasilkov, Reduction of skylight reflection effects in the above-water measurement of diffuse marine reflectance: Comment. *Appl. Optics*, 39, 1379-1381.
- Lait, L., Effects of satellite scanning configurations on derived gridded fields. *J. Geophys. Res.-Atmos.*, 105, 9063-9074.

- Mayr, H. G., J. G. Mengel, C. A. Reddy, K. L. Chan and H. S. Porter, Properties of QBO and SAO generated by gravity waves. *J. Atmos. Sci. Terr. Phys.*, 62, 1135.
- McPeters, R. D., S. Janz, E. Hilsenrath, T. Brown, D. Flittner and D. Heath, The retrieval of ozone profiles from limb scatter measurements: Results from the shuttle ozone limb sounding experiment. *Geophys. Res. Lett.*, 27, 2597-2600.
- Meijer, E. W., P. F. J. van Velthoven, A. M. Thompson, L. Pfister, H. Schlager, P. Schulte and H. Kelder, Model calculations of the impact of NO_x from air traffic, lightning and surface emissions, compared with measurement. *J. Geophys. Res.-Atmos.*, 105, 3833-3850.
- Morris, G. A., J. Ziemke, J. F. Gleason and M. R. Schoeberl, Trajectory mapping: A tool for validation of trace gas observations. *J. Geophys. Res.*, 105, 17,875-17,894.
- Nedoluha, G. E., R. M. Bevilacqua, K. W. Hoppel, M. Daehler, E. P. Shettle, J. H. Hornstein, M. D. Fromm, J. D. Lumpe and J. E. Rosenfield, POAM III measurements of dehydration in the Antarctic lower stratosphere. *Geophys. Res. Lett.*, 27, 1683-1686.
- Newchurch, M. J., L. Bishop, D. Cunnold, L. E. Flynn, S. Godin, S. H. Frith, L. Hood, A. J. Miller, S. Oltsman, W. Randel, G. Reinsel, R. Stolarski, R. Wang, E. Yang and J. M. Zawodny, Upper-stratospheric ozone trends 1979-1998. *J. Geophys. Res.*, 105, 14625-14636.
- Newman, P. A. and E. R. Nash, Quantifying the wave driving of the stratosphere. *J. Geophys. Res.-Atmos.*, 105, 12,485-12,497.
- Newman, P. A., D. W. Fahey, W. H. Brune, M. J. Kurylo and S. R. Kawa, Preface. *J. Geophys. Res.*, 104, 26,481-26,496.
- Oshchepkov, S., H. Isaka, J. Gayet, A. Sinyuk, F. Auriol, S. Havemann, 2000: Microphysical properties of mixed- phase and ice clouds retrieved from *in situ* airborne "Polar Nephelometer" measurements. *Geophys. Res. Lett.*, 27, 209-212.
- Pesnell, W. D., R. A. Goldberg, C. H. Jackman, D. L. Chenette and E. E. Gaines, Variation of mesospheric ozone during the highly relativistic electron event in May 1992 as measured by the high resolution doppler imager instrument on UARS. *J. Geophys. Res.*, 105, 22,943-22,953.
- Petropavlovskikh, I., R. Loughman, J. DeLisi and B. Herman, A comparison of UV intensities calculated by spherical-atmosphere radiation transfer codes: Application to the aerosol corrections. *J. Geophys. Res.*, 105, 14,737-14,746.
- Qin, W. H. and S. Gerstl, 3-D scene modeling of semidesert vegetation cover and its radiation regime. *Remote Sensing of Environment*, 74, 145-162.
- Qin, W. and S. Liang, Plane – parallel canopy radiation transfer modeling: Recent advances and future directions. *Rem. Sens. Revs.*, 18, 281-305.
- Reichardt, J., A. Tsias, and A. Behrendt, 2000: Optical properties of PSC IA-enhanced at UV and visible wavelengths: Model and observations. *Geophys. Res. Lett.*, 27, 201-204.

2000 REFEREED PUBLICATIONS

- Reichardt, J., S. E. Bisson, S. Reichardt, C. Weitkamp and B. Neidhart, Rotational vibrational-rotational raman differential absorption lidar for atmospheric ozone measurements: Methodology and experiments. *Appl. Optics*, 39, 6072-6079.
- Reichardt, J., M. Hess and A. Macke, Lidar inelastic multiple-scattering parameters of cirrus particle ensembles determined with geometrical-optics crystal phase functions. *Appl. Optics*, 39, 1895-1910.
- Reichardt, J., Error analysis of raman differential absorption lidar ozone measurements in ice clouds. *Appl. Opt.*, 39, 6058-6071.
- Sherwood, S. C., A “stratospheric drain” over the maritime continent. *Geophys. Res. Lett.*, 27, 677-680.
- Sherwood, S. C., Climate signal mapping and an application to atmospheric tides. *Geophys. Res. Lett.*, 27, 3525-3528.
- Sherwood, S. C., On moist stability. *Mon. Wea. Rev.*, 128, 4139-4142.
- Sherwood, S. C. and A. E. Dessler, On the control of stratospheric humidity. *Geophys. Res. Lett.*, 27, 2513-2516.
- Simpson, I. J., B. C. Sive, D. R. Blake, N. J. Blake, T. Y. Chen, J. P. Lopez, B. E. Anderson, G.W. Sachse, S. A. Vay, H. E. Fuelberg, Y. Kondo, A. M. Thompson and F. S. Rowland, Nonmethane hydrocarbon measurements in the North Atlantic flight corridor during the subsonic assessment ozone and nitrogen oxide experiment. *J. Geophys. Res.-Atmos.*, 105, 3785-3793.
- Sparling, L. C., Statistical perspectives on stratospheric transport. *Rev. Geophys.*, 38, 417-436.
- Steinbrecht, W., R. Neuber, P. von der Gathen, P. Wahl, T. J. McGee, M. R. Gross, U. Klein and J. Langer, Results of the 1998 ny-alesund ozone monitoring intercomparison. *J. Geophys. Res.-Atmos.*, 104, 30515-30523.
- Taalas, P., J. Kaurola, A. Kylling, D. Shindell, R. Sausen, M. Dameris, V. Grewe, J. Herman, J. Damski and B. Steil, The impact of greenhouse gases and halogenated species on future solar UV radiation doses. *Geophys. Res. Lett.*, 27, 1127-1130.
- Tabazadeh, A., M. L. Santee, M. Y. Danilin, H. C. Pumphrey, P. A. Newman, P. J. Hamill and J. L. Mergenthaler, Quantifying denitrification and its effect on ozone recovery. *Science*, 288, 1407-1411.
- Thompson, A. M., B. G. Doddridge, J. W. Witte, R. D. Hudson, W. T. Luke, J. E. Johnson, B. J. Johnson, S. J. Oltmans and R. Weller, A tropical Atlantic paradox: Shipboard and satellite views of a tropospheric ozone maximum and wave-one in January-February 1999. *Geophys. Res. Lett.*, 27, 3317-3320.
- Thompson, A. M., H. B. Singh and H. Schlager, Introduction to special section: Subsonic assessment ozone and nitrogen oxide experiment (SONEX) and pollution from aircraft emissions in the North Atlantic flight corridor (POLINAT 2). *J. Geophys. Res.*, 105, 3595-3603.

Tsou, J. J., B. J. Connor, A. Parrish, R. B. Pierce, I. S. Boyd, G. E. Bodeker, W. P. Chu, J. M. Russell, D. P. J. Swart and T. J. McGee, NDSC millimeter wave ozone observations at Lauder, New Zealand, 1992-1998: Improved methodology, validation, and variation study. *J. Geophys. Res.-Atmos.*, 105, 24263-24281.

Vitt, F. M., T. E. Cravens and C. H. Jackman, A two-dimensional model of thermospheric nitric oxide sources and their contributions to the middle atmospheric chemical balance. *J. Atmos. Sol.-Terr. Phys.*, 62, 653-667.

Vitt, F. M., T. P. Armstrong, T. E. Cravens, G. A. M. Dreschhoff, C. H. Jackman and C. M. Laird, Computed contributions to odd nitrogen concentrations in the Earth's polar middle atmosphere by energetic charged particles. *J. Atmos. Sol.-Terr. Phys.*, 62, 669-683.

Wang, Y., S. C. Liu, B. E. Anderson, Y. Kondo, G. L. Gregory, G. W. Sachse, S. A. Vay, R. Blake, H. B. Singh and A. M. Thompson, Evidence of convection as a major source of condensation nuclei in the northern midlatitude upper troposphere. *Geophys. Res. Lett.*, 27, 369-372.

Weatherhead, E. C., G. C. Reinsel, G. C. Tiao, C. H. Jackman, L. Bishop, S. M. Hollandsworth Frith, J. DeLiusi, T. Keller, S. J. Oltmans, E. L. Fleming, D. J. Wuebbles, J. B. Kerr, A. J. Miller, J. R. Herman, R. D. McPeters, R. M. Nagatani and J. E. Frederick, Detecting the recovery of total column ozone. *J. Geophys. Res.*, 105, 22,201-22,210.

Weaver, C. J., A. R. Douglass and R. B. Rood, Lamination frequencies as a diagnostic for horizontal mixing in a 3D transport model. *J. Atmos. Sci.*, 57, 247-261.

Ziemke, J. R., S. Chandra and P. K. Bhartia, A new NASA data product: Tropospheric and stratospheric column ozone in the tropics derived from TOMS measurements. *Bull. Amer. Meteor. Soc.*, 81, 580-583.

Ziemke, J. R., S. Chandra, J. Herman and C. Varotsos, Erythemally weighted UV trends over northern latitudes derived from Nimbus 7 TOMS measurements. *J. Geophys. Res.-Atmos.*, 105, 7373-7382.